Please delete the existing Paragraph 29 and substitute therefor the following replacement paragraph:

--[0029] Referring now to Figure 2A, a typical mobile satellite payload system including a plurality of downconverters 30 and a plurality of filters 31 between the LNAs 28 and typical A/D converters 32 is shown.--

Please delete the existing Paragraph 30 and substitute therefor the following replacement paragraph:

-- [0030] The receive radiating elements 24 receive communication signals 26, which are detected at the element level to create received signals [S(t)], from a user at a given direction. The received signals [S(t)] have generally equal amplitudes, but different phases at each receive radiating element 24. Each received signal [S(t)] may be decomposed to two components: the carrier signal and the information signal, which modulates the carrier. A typical satellite communication signal may have a carrier signal frequency (f_c) equal to approximately 2GHz. The corresponding information signal frequency may have a bandwidth at approximately 10-20KHz or less.--

Please delete the existing Paragraph 54 and substitute therefor the following replacement paragraph:

-- [0050] The above-described invention, by eliminating the downconverter reduces the number of mobile satellite payload components. The reduction of the number of mobile satellite payload components may reduce weight, costs, and hardware of the mobile satellite payload. The present invention also provides a method for digitizing signals at frequency bands up to C-band without using a separate downconverter.--